

=> file .biotech

=> s (Bioactive(1)peptide)

L1 7936 (BIOACTIVE(L) PEPTIDE)

=> s (fish protein)

L2 3349 (FISH PROTEIN)

=> s l1 and l2

L3 4 L1 AND L2

=> d l3 1-4 bib ab

L3 ANSWER 1 OF 4 USPATFULL

AN 2002:113907 USPATFULL

TI Recombinant proteins containing repeating units

IN Wang, Qi, Valley Park, MO, UNITED STATES

Guan, Zhonghon, Chesterfield, MO, UNITED STATES

Baggot, Brendan O., Granite City, IL, UNITED STATES

Hadfield, Kristen, Davis, CA, UNITED STATES

Zhao, Jianmin, St. Louis, MO, UNITED STATES

Edwards, Janice, University City, MO, UNITED STATES

PI US 2002059656 A1 20020516

AI US 2001-804733 A1 20010313 (9)

PRAI US 2000-188990P 20000313 (60)

DT Utility

FS APPLICATION

LREP SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR,  
ST LOUIS, MO, 63102

CLMN Number of Claims: 118

ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

LN.CNT 2289

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the production of recombinant proteins containing repeating units are disclosed. Also disclosed are methods for the production of degenerate polynucleotides encoding said recombinant proteins. In addition, polypeptides and polynucleotides produced by the methods of current invention are also disclosed.

L3 ANSWER 2 OF 4 USPATFULL

AN 2002:88617 USPATFULL

TI Bioactive peptides, uses thereof and process for the production of same

IN Raa, Jan, Oslo, NORWAY

Rorstad, Gunnar, Tromso, NORWAY

PA Biotec ASA, Tromso, NORWAY (non-U.S. corporation)

PI US 6376650 B1 20020423

AI US 1998-61575 19980416 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed, Abdel A.

LREP Ladas & Parry

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 348

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel **bioactive peptide** compositions and process for producing the same and the use of such compositions for enhancing the growth of warm blooded animals and fish is disclosed.

L3 ANSWER 3 OF 4 USPATFULL

AN 2002:43203 USPATFULL

TI COMPONENTS OF UBIQUITIN LIGASE COMPLEXES AND USES RELATED THERETO  
IN CALIGIURI, MAUREEN, READING, MA, UNITED STATES  
ROLFE, MARK, NEWTON, MA, UNITED STATES  
PI US 2002025569 A1 20020228  
AI US 1997-915048 A1 19970820 (8)  
DT Utility  
FS APPLICATION  
LREP ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624  
CLMN Number of Claims: 68  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 4055

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the isolation of a new class of ubiquitin ligases involved in protein degradation in vertebrate organisms, such as protein degradation of cell cycle regulatory proteins. Accordingly, the invention provides nucleic acids and the proteins encoded by said nucleic acids which play a role in the ubiquitinylation and subsequent degradation of substrate proteins and in regulating cell proliferation, cell differentiation, and cell survival. The invention also provides methods for modulating protein degradation, cell proliferation, cell differentiation and/or cell survival by modulating protein ubiquitination; assays for identifying compounds which modulate protein degradation, cell proliferation, differentiation and/or cell survival; methods for treating disorders associated with aberrant protein degradation, cell proliferation, cell differentiation, and/or cell survival; and diagnostic and prognostic assays for determining whether a subject is at risk of developing a disorder associated with an aberrant protein degradation, cell proliferation, cell differentiation, and/or survival.

L3 ANSWER 4 OF 4 USPATFULL  
AN 1999:170407 USPATFULL  
TI Method of making lipid metabolic pathway compositions  
IN Gimeno, Carlos J., Boston, MA, United States  
Acton, Susan, Jamaica Plain, MA, United States  
PA Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)  
PI US 6008014 19991228  
AI US 1996-707399 19960904 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Burke, Julie  
LREP Lahive & Cockfield, LLP, Mandragouras, Amy E.  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 4049

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of novel genes encoding Lipid Metabolic Pathway (LMP) polypeptides. Therapeutics, diagnostics and screening assays based on these molecules are also disclosed.

=> s 11 or 12 and (extract? or purificat? or produc? or isolat? or obtain? or deriv?)

5 FILES SEARCHED...

L4 9845 L1 OR L2 AND (EXTRACT? OR PURIFICAT? OR PRODUC? OR ISOLAT? OR OBTAIN? OR DERIV?)

=> s 14 and (enzymatic(1)hydrolys? or hydrolytic enzyme)

L5 804 L4 AND (ENZYMATIC(L) HYDROLYS? OR HYDROLYTIC ENZYME)

=> s 15 and (pepsin)

L6 138 L5 AND (PEPSIN)

=> s 16 and (aromatic amino acid?)

L7 34 L6 AND (AROMATIC AMINO ACID?)

=> s 17 and (tyrosine or phenylalanine or arginine)

L8 28 L7 AND (TYROSINE OR PHENYLALANINE OR ARGININE)

=> s 18 and (Atlantic cod or Gadus morhua)

L9 3 L8 AND (ATLANTIC COD OR GADUS MORHUA)

=> d 19 1-3 bib ab

L9 ANSWER 1 OF 3 USPATFULL

AN 2002:88617 USPATFULL

TI Bioactive peptides, uses thereof and process for the **production**  
of same

IN Raa, Jan, Oslo, NORWAY

Rorstad, Gunnar, Tromso, NORWAY

PA Biotec ASA, Tromso, NORWAY (non-U.S. corporation)

PI US 6376650 B1 20020423

AI US 1998-61575 19980416 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed,  
Abdel A.

LREP Ladas & Parry

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 348

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel **bioactive peptide** compositions and process for  
**producing** the same and the use of such compositions for  
enhancing the growth of warm blooded animals and fish is disclosed.

L9 ANSWER 2 OF 3 USPATFULL

AN 2001:194400 USPATFULL

TI Bioactive peptides, uses thereof and process for the production of same

IN Raa, Jan, Oslo, Norway

Rorstad, Gunnar, Tromso, Norway

PI US 2001036915 A1 20011101

AI US 2001-854968 A1 20010514 (9)

RLI Division of Ser. No. US 1998-61575, filed on 16 Apr 1998, PENDING

DT Utility

FS APPLICATION

LREP Ladas & Parry, Suite 1200, 224 South Michigan Avenue, Chicago, IL, 60604

CLMN Number of Claims: 32

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 414

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel **bioactive peptide** compositions and process for  
producing the same and the use of such compositions for enhancing the  
growth of warm blooded animals and fish is disclosed.

L9 ANSWER 3 OF 3 WPIDS (C) 2002 THOMSON DERWENT

AN 1999-592846 [51] WPIDS

DNC C1999-173255

TI Production of **bioactive peptide** compositions, useful  
in animal feed to enhance growth of warm blooded animal.

DC B04 C03 D13 D16

IN RAA, J; RORSTAD, G

PA (BIOT-N) BIOTEC ASA; (RAAJ-I) RAA J; (RORS-I) RORSTAD G

CYC 29

PI EP 951837 A1 19991027 (199951)\* EN 9p

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

NO 9901736 A 19991018 (199953)  
CA 2269396 A1 19991016 (200012) EN  
JP 2000001499 A 20000107 (200012) 24p  
US 2001036915 A1 20011101 (200168)  
US 6376650 B1 20020423 (200232)

ADT EP 951837 A1 EP 1999-302837 19990413; NO 9901736 A NO 1999-1736 19990413;  
CA 2269396 A1 CA 1999-2269396 19990415; JP 2000001499 A JP 1999-107311  
19990414; US 2001036915 A1 Div ex US 1998-61575 19980416, US 2001-854968  
20010514; US 6376650 B1 US 1998-61575 19980416

PRAI US 1998-61575 19980416; US 2001-854968 20010514

AB EP 951837 A UPAB: 19991207

NOVELTY - The production of **bioactive peptide** (I)  
compositions is new, and comprises:

- (a) treating a protein source with an acid;
- (b) contacting the resulting acid treated protein source with **pepsin** enzyme derived from fish;
- (c) removing lipids from the **pepsin** treated acidified protein source;
- (d) removing solids from **pepsin** treated source; and
- (e) recovering the resulting **bioactive peptide** compositions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) **bioactive peptide** product (Ia);
- (2) production of growth enhancing peptides (II) characterized by comprising enzymatically hydrolyzing a protein source with **pepsin** enzyme source derived from fish at pH 2-6;
- (3) **bioactive peptide** compositions comprising essentially of a mixture of peptides having an **aromatic amino acid** in the N-terminal position, produced by **enzymatic hydrolysis** of a protein source at pH 1-6 with **pepsin** derived from fish as the **hydrolytic enzyme**;
- (4) a process for enhancing the growth of a warm blooded animal and fish comprising feeding the animal with an amount of (II) sufficient to effect growth; and
- (5) a feed composition for animals which will enhance growth comprising (II).

USE - The **bioactive peptide** products (Ia) and compositions (I) are useful for enhancing growth in warm blooded animals, especially for the production of feed to enhance animal growth (all claimed).

ADVANTAGE - The **bioactive peptide** product (Ia) and compositions (I) are used at low levels to enhance the growth of fish and provides an alternative to plasma products.  
Dwg.0/0

=> dis his

(FILE 'HOME' ENTERED AT 11:36:10 ON 23 JUN 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, BIOTECHDS, EMBASE, USPATFULL, WPIDS'  
ENTERED AT 11:36:33 ON 23 JUN 2002

L1 7936 S (BIOACTIVE(L) PEPTIDE)  
L2 3349 S (FISH PROTEIN)  
L3 4 S L1 AND L2  
L4 9845 S L1 OR L2 AND (EXTRACT? OR PURIFICAT? OR PRODUC? OR ISOLAT? O  
L5 804 S L4 AND (ENZYMATIC(L) HYDROLYS? OR HYDROLYTIC ENZYME)  
L6 138 S L5 AND (PEPSIN)  
L7 34 S L6 AND (AROMATIC AMINO ACID?)  
L8 28 S L7 AND (TYROSINE OR PHENYLALANINE OR ARGININE)  
L9 3 S L8 AND (ATLANTIC COD OR GADUS MORHUA)

=> s 13 and 18  
L10 1 L3 AND L8

=> d 110 bib ab

L10 ANSWER 1 OF 1 USPATFULL  
AN 2002:88617 USPATFULL  
TI Bioactive peptides, uses thereof and process for the **production**  
of same  
IN Raa, Jan, Oslo, NORWAY  
Rorstad, Gunnar, Tromso, NORWAY  
PA Biotec ASA, Tromso, NORWAY (non-U.S. corporation)  
PI US 6376650 B1 20020423  
AI US 1998-61575 19980416 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed,  
Abdel A.  
LREP Ladas & Parry  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 348  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Novel **bioactive peptide** compositions and process for  
**producing** the same and the use of such compositions for  
enhancing the growth of warm blooded animals and fish is disclosed.

=> d 18 1-10 bib ab

L8 ANSWER 1 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AN 1977:133387 BIOSIS  
DN BA63:28251  
TI A LOW PHENYL ALANINE HIGH **TYROSINE** PLASTEIN AS AN ACCEPTABLE  
DIETETIC FOOD METHOD OF PREPARATION BY USE OF **ENZYMATIC** PROTEIN  
**HYDROLYSIS** AND RE SYNTHESIS.  
AU YAMASHITA M; ARAI S; FUJIMAKI M  
SO J FOOD SCI, (1976) 41 (5), 1029-1032.  
CODEN: JFDSAZ. ISSN: 0022-1147.  
FS BA; OLD  
LA Unavailable  
AB A method was proposed to prepare a peptide-type low-**phenylalanine**  
, high-**tyrosine** food for curing phenylketonuria. A **fish**  
**protein** concentrate (FPC) and a soybean protein **isolate**  
(SPI) were used as starting materials. Each was limitedly hydrolyzed with  
a very small amount of **pepsin**. The peptic hydrolysate was  
further hydrolyzed with pronase under an unconventional pH-condition to  
liberate **aromatic amino acids**. These were  
removed by Sephadex G-15 with the aid of its adsorption activity. To the  
resulting **aromatic amino acid-free** fraction  
were added ethyl esters of L-**tyrosine** and L-tryptophan and the  
mixture was incubated with papain under such conditions as its reverse  
process called plastein synthesis reaction proceeded efficiently. The  
reaction **product** was treated by ultrafiltration to  
**obtain** a plastein as a fraction having the lowest MW of 500. The  
yields were 69.3% from FPC and 60.9% from SPI. **Phenylalanine**,  
**tyrosine** and tryptophan contents were 0.05%, 7.82% and 2.98% in  
the FPC plastein and 0.23%, 7.69% and 2.80% in the SPI plastein. Each  
plastein did not contain any free amino acids and was almost completely  
flat in taste and odor.

L8 ANSWER 2 OF 28 USPATFULL  
AN 2002:137157 USPATFULL

TI Nucleic acid which encodes the tumor marker ZSIG62  
 IN Sheppard, Paul O., Granite Falls, WA, United States  
 Novak, Julia E., Bainbridge Island, WA, United States  
 Raymond, Fenella, Seattle, WA, United States  
 PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)  
 PI US 6403783 B1 20020611  
 AI US 2000-493565 20000118 (9)  
 PRAI US 1999-116321P 19990119 (60)  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Caputa, Anthony C.; Assistant Examiner: Hunt, Jennifer  
 LREP Jones, Phillip B. C.  
 CLMN Number of Claims: 27  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 3540  
 AB Studies indicate that mutations in tumor suppressor genes occur early in the process of carcinogenesis, and that these mutations are correlated with a subsequent development of cancer. The detection of such alterations would provide useful molecular markers for diagnosis, surveillance, early tumor identification and intervention, and prognosis. A novel human gene, designated as "Zsig62," resides within a region of chromosome 16q that is associated with prostate and breast cancer, and that appears to contain tumor suppressor genes. Like a tumor suppressor gene, the Zsig62 gene is expressed in particular normal tissues, but not in tumors derived from those tissues.

L8 ANSWER 3 OF 28 USPATFULL  
 AN 2002:129743 USPATFULL  
 TI Nucleic acids encoding neural/pancreatic receptor **tyrosine** phosphatase  
 IN Chiang, Ming-Ko, Boston, MA, United States  
 Flanagan, John G., Newton, MA, United States  
 PA President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)  
 PI US 6399326 B1 20020604  
 AI US 1997-884569 19970627 (8)  
 PRAI US 1996-21040P 19960702 (60)  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Landsman, Robert S.  
 LREP Foley, Hoag & Eliot, Clauss, Isabelle M.  
 CLMN Number of Claims: 15  
 ECL Exemplary Claim: 1  
 DRWN 17 Drawing Figure(s); 12 Drawing Page(s)  
 LN.CNT 3712  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB We describe here a new class of protein **tyrosine** phosphatases (PTP), called "PTP-NP" (for neural and pancreatic) receptors. The sequence of an exemplary PTP-NP gene (SEQ ID No. 1) indicates it encodes a receptor type PTP (SEQ ID No. 2) with a single **tyrosine** phosphatase domain. Comparison of PTP-NP with the other known PTPs reveals a cysteine-conserved motif in the extracellular domain and, together with their homology in the phosphatase domain, this defines a new subclass of receptor type PTPs.

L8 ANSWER 4 OF 28 USPATFULL  
 AN 2002:122274 USPATFULL  
 TI Matrices for drug delivery and methods for making and using the same  
 IN Babich, John W., Scituate, MA, United States  
 Zubieta, Jon, Syracuse, NY, United States  
 Bonavia, Grant, Kensington, MD, United States  
 PA Biostream, Inc., Cambridge, MA, United States (U.S. corporation)  
 PI US 6395299 B1 20020528  
 AI US 2000-503438 20000214 (9)

PRAI US 1999-119828P 19990212 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Patterson, Jr., Charles L.  
LREP Foley, Hoag & Eliot, LLP  
CLMN Number of Claims: 140  
ECL Exemplary Claim: 1  
DRWN 13 Drawing Figure(s); 13 Drawing Page(s)  
LN.CNT 4531

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In one aspect, biocompatible matrices such as sol-gels encapsulating a reaction center may be administered to a subject for conversion of prodrugs into biologically active agents. In certain embodiments, the biocompatible matrices of the present invention are sol-gels. In one embodiment, the enzyme L-amino acid decarboxylase is encapsulated and implanted in the brain to convert L-dopa to dopamine for treatment of Parkinson's disease.

L8 ANSWER 5 OF 28 USPATFULL

AN 2002:119539 USPATFULL

TI 1983, 52881, 2398, 45449, 50289, and 52872 novel G protein-coupled receptors and uses therefor

IN Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES

Galvin, Katherine M., Jamaica Plain, MA, UNITED STATES

Silos-Santiago, Inmaculada, Cambridge, MA, UNITED STATES

PI US 2002061522 A1 20020523

AI US 2001-796338 A1 20010228 (9)

PRAI US 2000-186059P 20000229 (60)

DT Utility

FS APPLICATION

LREP LOUIS MYERS, FISH & RICHARDSON P.C., 225 Franklin Street, Boston, MA, 02110-2804

CLMN Number of Claims: 36

ECL Exemplary Claim: 1

DRWN 49 Drawing Page(s)

LN.CNT 6599

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 1983, 52881, 2398, 45449, 50289, and 52872 nucleic acid molecules, which encode novel G protein-coupled receptor members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 1983, 52881, 2398, 45449, 50289, or 52872 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 1983, 52881, 2398, 45449, 50289, or 52872 gene has been introduced or disrupted. The invention still further provides isolated 1983, 52881, 2398, 45449, 50289, or 52872 proteins, fusion proteins, antigenic peptides and anti-1983, 52881, 2398, 45449, 50289, or 52872 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

L8 ANSWER 6 OF 28 USPATFULL

AN 2002:102612 USPATFULL

TI Vertebrate embryonic pattern-inducing proteins

IN Ingham, Philip W., Summertown, UNITED KINGDOM

McMahon, Andrew P., Lexington, MA, United States

Tabin, Clifford J., Cambridge, MA, United States

PA President & Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

Imperial Cancer Research Technology, Ltd., London, UNITED KINGDOM

(non-U.S. corporation)

PI US 6384192 B1 20020507

AI US 1997-957874 19971020 (8)

RLI Continuation of Ser. No. US 1995-462386, filed on 5 Jun 1995

Continuation-in-part of Ser. No. US 1995-435093, filed on 4 May 1995,

now abandoned Continuation-in-part of Ser. No. US 1994-356060, filed on

14 Dec 1994, now patented, Pat. No. US 5844079 Continuation-in-part of  
Ser. No. US 1993-176427, filed on 30 Dec 1993, now patented, Pat. No. US  
5789543

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Kaufman, Claire  
M.

LREP Ropes & Gray, Vincent, Matthew P., Halstead, David P.

CLMN Number of Claims: 38

ECL Exemplary Claim: 1

DRWN 19 Drawing Figure(s); 19 Drawing Page(s)

LN.CNT 7476

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns the discovery that proteins encoded by a  
family of vertebrate genes, termed here hedgehog-related genes, comprise  
morphogenic signals produced by embryonic patterning centers, and are  
involved in the formation of ordered spatial arrangements of  
differentiated tissues in vertebrates. The present invention makes  
available compositions and methods that can be utilized, for example to  
generate and/or maintain an array of different vertebrate tissue both in  
vitro and in vivo.

L8 ANSWER 7 OF 28 USPATFULL

AN 2002:88617 USPATFULL

TI Bioactive peptides, uses thereof and process for the **production**  
of same

IN Raa, Jan, Oslo, NORWAY

Rorstad, Gunnar, Tromso, NORWAY

PA Biotec ASA, Tromso, NORWAY (non-U.S. corporation)

PI US 6376650 B1 20020423

AI US 1998-61575 19980416 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed,  
Abdel A.

LREP Ladas & Parry

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 348

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel **bioactive peptide** compositions and process for  
**producing** the same and the use of such compositions for  
enhancing the growth of warm blooded animals and fish is disclosed.

L8 ANSWER 8 OF 28 USPATFULL

AN 2002:66898 USPATFULL

TI New member of the lectin superfamily

IN Sheppard, Paul O., Granite Falls, WA, UNITED STATES

Bishop, Paul D., Fall City, WA, UNITED STATES

PI US 2002037551 A1 20020328

AI US 2001-801438 A1 20010307 (9)

PRAI US 2000-187918P 20000308 (60)

US 2000-233967P 20000920 (60)

DT Utility

FS APPLICATION

LREP Phillip Jones, ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle,  
WA, 98102

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3518

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypeptides containing a C-type lectin carbohydrate recognition domain  
play roles in many essential functions, such as organization of the



extracellular matrix, endocytosis, primary immune system function, and blood cell interaction. As such, this class of proteins often provides therapeutically useful drugs. The present invention provides a new lectin, designated "Zlec1."

L8 ANSWER 9 OF 28 USPATFULL

AN 2002:21834 USPATFULL

TI Human cytokine receptor

IN Presnell, Scott R, Tacoma, WA, UNITED STATES

Xu, Wenfeng, Mukilteo, WA, UNITED STATES

Kindsvogel, Wayne, Seattle, WA, UNITED STATES

Chen, Zhi, Seattle, WA, UNITED STATES

PI US 2002012669 A1 20020131

AI US 2000-728911 A1 20001201 (9)

PRAI US 1999-169049P 19991203 (60)

US 2000-232219P 20000913 (60)

US 2000-244610P 20001031 (60)

DT Utility

FS APPLICATION

LREP Jennifer K Johnson J D, ZymoGenetics Inc, 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 66

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 7478

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cytokines and their receptors have proven usefulness in both basic research and as therapeutics. The present invention provides a new human cytokine receptor designated as "Zcytor16."

L8 ANSWER 10 OF 28 USPATFULL

AN 2002:12277 USPATFULL

TI Zcys5: a member of the cystatin superfamily

IN Holloway, James L., Seattle, WA, UNITED STATES

PI US 2002006656 A1 20020117

AI US 2000-740638 A1 20001218 (9)

PRAI US 1999-172119P 19991223 (60)

DT Utility

FS APPLICATION

LREP Phillip B.C. Jones, J.D., Ph.D., ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3524

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The cystatin superfamily are inhibitors of cysteine proteinases, which function in a protective role with regard to various pathological actions of endogenous proteinases. Zcys5 is a new member of this superfamily.

=> d 18 11-28 bib ab

L8 ANSWER 11 OF 28 USPATFULL

AN 2002:8229 USPATFULL

TI Zvwf1: a member of the von willebrand factor type A domain superfamily

IN Holloway, James L., Seattle, WA, UNITED STATES

PI US 2002004228 A1 20020110

AI US 2000-732227 A1 20001207 (9)

PRAI US 1999-169760P 19991209 (60)

DT Utility

FS APPLICATION

LREP Phillip B.C. Jones, J.D., Ph.D., ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3380

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins comprising one or more copies of von Willebrand factor type A domain play important roles in host defense mechanisms, such as immune response, inflammation, and hemostasis. Zvwf1 is a new member of this superfamily.

L8 ANSWER 12 OF 28 USPATFULL

AN 2002:3610 USPATFULL

TI Zace1: a human metalloenzyme

IN Sheppard, Paul O., Granite Falls, WA, UNITED STATES

PI US 2002001583 A1 20020103

AI US 2001-846996 A1 20010501 (9)

RLI Division of Ser. No. US 1999-440325, filed on 15 Nov 1999, PENDING

PRAI US 1998-109783P 19981125 (60)

DT Utility

FS APPLICATION

LREP Phillip Jones, Patent Department, ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Angiotensin-converting enzyme is a zinc metallopeptidase that plays roles in blood pressure regulation and fertility. The catalytic activities of angiotensin converting enzymes include the production of the potent vasopressor angiotensin II from angiotensin I, and the inactivation of the vasodilatory peptide bradykinin. Zace1 is a new form of human zinc metallopeptidase, which includes one zinc-dependent catalytic domain containing the motif "HEXXH" and one downstream "EX(I/V)X(D/S)" motif.

L8 ANSWER 13 OF 28 USPATFULL

AN 2001:226441 USPATFULL

TI Interferon-.epsilon.

IN Conklin, Darrell C., Seattle, WA, United States

Grant, Francis J., Seattle, WA, United States

Rixon, Mark W., Issaquah, WA, United States

Kindsvogel, Wayne, Seattle, WA, United States

PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

PI US 6329175 B1 20011211

AI US 1999-397992 19990916 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Eyler, Yvonne; Assistant Examiner: Andres, Janet L.

LREP Jones, Phillip B. C.

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 4876

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Interferons represent an important class of biopharmaceutical products, which have a proven track record in the treatment of a variety of medical conditions, including the treatment of certain autoimmune diseases, the treatment of particular cancers, and the enhancement of the immune response against infectious agents. To date, four types of interferons have been found in humans: interferon-.alpha., interferon-.beta., interferon-.gamma., and interferon-.omega.. The present invention provides new forms of human and murine interferon, "interferon-.epsilon.," which have applications in diagnosis and therapy.

L8 ANSWER 14 OF 28 USPATFULL

AN 2001:224217 USPATFULL

TI Human ribonuclease

IN Conklin, Darrell C., Seattle, WA, United States

PI US 2001049434 A1 20011206

AI US 2001-801231 A1 20010307 (9)

PRAI US 2000-187917P 20000308 (60)

DT Utility

FS APPLICATION

LREP Phillip Jones, ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3760

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Although ribonucleases are characterized by the hydrolysis of RNA, these enzymes perform many functions, including anti-parasitic activity, anti-bacterial activity, and anti-viral activity. Ribonucleases are also known to possess anti-neoplastic activity, and angiogenesis-stimulating activity. "Zrnase1" is a new member of the human ribonuclease family.

L8 ANSWER 15 OF 28 USPATFULL

AN 2001:196827 USPATFULL

TI Murine interferon-.alpha.

IN Presnell, Scott R., Tacoma, WA, United States

Feldhaus, Andrew L., Lynnwood, WA, United States

Gao, Zeren, Redmond, WA, United States

PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

PI US 6312924 B1 20011106

AI US 2000-528760 20000317 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Kemmerer, Elizabeth; Assistant Examiner: Andres, Janet L.

LREP Jones, Phillip B. C.

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4309

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Interferons represent an important class of biopharmaceutical products, which have a proven track record in the treatment of a variety of medical conditions, including the treatment of certain autoimmune diseases, the treatment of particular cancers, and the enhancement of the immune response against infectious agents. The present invention provides a new form of murine interferon-.alpha., which has applications in diagnosis and therapy.

L8 ANSWER 16 OF 28 USPATFULL

AN 2001:194400 USPATFULL

TI Bioactive peptides, uses thereof and process for the production of same

IN Raa, Jan, Oslo, Norway

Rorstad, Gunnar, Tromso, Norway

PI US 2001036915 A1 20011101

AI US 2001-854968 A1 20010514 (9)

RLI Division of Ser. No. US 1998-61575, filed on 16 Apr 1998, PENDING

DT Utility

FS APPLICATION

LREP Ladas & Parry, Suite 1200, 224 South Michigan Avenue, Chicago, IL, 60604

CLMN Number of Claims: 32

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 414

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel **bioactive peptide** compositions and process for producing the same and the use of such compositions for enhancing the growth of warm blooded animals and fish is disclosed.

L8 ANSWER 17 OF 28 USPATFULL

AN 2001:194129 USPATFULL

TI Educational kit and method using tumor necrosis factor-stimulated gene and protein

IN Holloway, James L., Seattle, WA, United States

PI US 2001036643 A1 20011101

AI US 2000-728912 A1 20001201 (9)

PRAI US 1999-169252P 19991206 (60)

DT Utility

FS APPLICATION

LREP Paul G. Lunn, Esq., ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3592

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An educational kit containing Ztsg1 gene and optionally, a Ztsg1 polypeptide, antibody, and anti-idiotypic antibody. Tumor necrosis factor-stimulated protein (Ztsg1), polynucleotides that encode it and antibodies, which bind to it. Ztsg1 can be administered to an individual to stimulate the immune system. Antibodies to Ztsg1 can be used to diagnose rheumatoid arthritis in an individual.

L8 ANSWER 18 OF 28 USPATFULL

AN 2001:190956 USPATFULL

TI Human patched genes and proteins, and uses related thereto

IN Bumcrot, David H., Belmont, MA, United States

PA Curis, Inc., Cambridge, MA, United States (U.S. corporation)

PI US 6309879 B1 20011030

AI US 1998-207857 19981208 (9)

PRAI US 1997-67940P 19971208 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: O'Hara, Eileen B.

LREP Ropes & Gray, LLP, Vincent, Matthew P., Halstead, David P.

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3036

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of a new member of the hedgehog receptor family, referred to herein as human ptc-2 (for patched-2 protein). The human ptc-2 polypeptides of the present invention include polypeptides which bind the products of the hedgehog gene family. Hedgehog family members are known for their broad involvement in the formation and maintenance of ordered spatial arrangements of differentiated tissues in vertebrates, both adult and embryonic, and can be used to generate and/or maintain an array of different vertebrate tissue both in vitro and in vivo.

L8 ANSWER 19 OF 28 USPATFULL

AN 2001:142135 USPATFULL

TI Zace 1: a human metalloenzyme

IN Sheppard, Paul O., Granite Falls, WA, United States

PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

PI US 6280994 B1 20010828

AI US 1999-440325 19991115 (9)

DT Utility

FS GRANTED  
EXNAM Primary Examiner: Achutamurthy, Ponnathapu; Assistant Examiner: Moore, William W.  
LREP Jones, Phillip B. C.  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3706

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Angiotensin-converting enzyme is a zinc metallopeptidase that plays roles in blood pressure regulation and fertility. The catalytic activities of angiotensin converting enzymes include the production of the potent vasopressor angiotensin II from angiotensin I, and the inactivation of the vasodilatory peptide bradykinin. Zace1 is a new form of human zinc metallopeptidase, which includes one zinc-dependent catalytic domain containing the motif "HEXXH" and one downstream "EX(I/V)X(D/S)" motif.

L8 ANSWER 20 OF 28 USPATFULL

AN 2001:126124 USPATFULL

TI Nucleic acids encoding hedgehog proteins

IN Ingham, Philip W., Summertown, United Kingdom  
McMahon, Andrew P., Lexington, MA, United States  
Tabin, Clifford J., Cambridge, MA, United States

PA President & Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)  
Imperial Cancer Research Technology, Ltd., United Kingdom (non-U.S. corporation)

PI US 6271363 B1 20010807

AI US 1997-954698 19971020 (8)

RLI Continuation of Ser. No. US 1995-462386, filed on 5 Jun 1995  
Continuation-in-part of Ser. No. US 1995-435093, filed on 4 May 1995  
Continuation-in-part of Ser. No. US 1994-356060, filed on 14 Dec 1994, now patented, Pat. No. US 5844079  
Continuation-in-part of Ser. No. US 1993-176427, filed on 30 Dec 1993, now patented, Pat. No. US 5789543

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Kaufman, Claire M.

LREP Foley, Hoag & Eliot, LLP, Vincent, Matthew P., Varma, Anita

CLMN Number of Claims: 38

ECL Exemplary Claim: 2

DRWN 19 Drawing Figure(s); 19 Drawing Page(s)

LN.CNT 7491

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns the discovery that proteins encoded by a family of vertebrate genes, termed here hedgehog-related genes, comprise morphogenic signals produced by embryonic patterning centers, and are involved in the formation of ordered spatial arrangements of differentiated tissues in vertebrates. The present invention makes available compositions and methods that can be utilized, for example to generate and/or maintain an array of different vertebrate tissue both in vitro and in vivo.

L8 ANSWER 21 OF 28 USPATFULL

AN 2001:112054 USPATFULL

TI Screening assays for hedgehog agonists and antagonists

IN Marigo, Valeria, Brookline, MA, United States  
Tabin, Clifford J., Cambridge, MA, United States  
Ingham, Philip W., Summertown, United Kingdom  
McMahon, Andrew P., Lexington, MA, United States

PA Imperial Cancer Res. Technology, United Kingdom (non-U.S. corporation)  
President & Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

PI US 6261786 B1 20010717

AI US 1996-674509 19960702 (8)  
RLI Continuation-in-part of Ser. No. US 1995-460900, filed on 5 Jun 1995, now patented, Pat. No. US 6156747 Continuation-in-part of Ser. No. US 1995-462386, filed on 5 Jun 1995 Continuation-in-part of Ser. No. US 1995-435093, filed on 4 May 1995, now abandoned Continuation-in-part of Ser. No. US 1994-356060, filed on 14 Dec 1994, now patented, Pat. No. US 5844079 Continuation-in-part of Ser. No. US 1993-176427, filed on 30 Dec 1993, now patented, Pat. No. US 5789543  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Kaufman, Claire M.  
LREP Ropes & Gray  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 25 Drawing Figure(s); 21 Drawing Page(s)  
LN.CNT 8121

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns the discovery that proteins encoded by a family of vertebrate genes, termed here hedgehog-related genes, comprise morphogenic signals produced by embryonic patterning centers, and are involved in the formation of ordered spatial arrangements of differentiated tissues in vertebrates. The present invention makes available compositions and methods that can be utilized, for example to generate and/or maintain an array of different vertebrate tissue both in vitro and in vivo.

L8 ANSWER 22 OF 28 USPATFULL  
AN 2001:90126 USPATFULL  
TI Multi-phase food & beverage  
IN Zhao, Iris Ginron, Los Angeles, CA, United States  
PI US 2001002269 A1 20010531  
AI US 2000-748775 A1 20001227 (9)  
RLI Continuation-in-part of Ser. No. US 1997-852238, filed on 6 May 1997, ABANDONED  
DT Utility  
FS APPLICATION  
LREP Iris G. Zhao, c/o Paul D. Inglesby, One Bala Plaza, Suite 213, Bala Cynwyd, PA, 19004  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 2636  
AB A method of making, combining, and using a balanced multi-phase food mixture and a multi-phase beverage made thereof is incorporated into carbonated herb beverage, aerated tea, fast fermented grain drink, amino acid flavored beverage, alcohol soaked cocktail drink, and aerated vegetable beverage. The liquid phase comprises total small molecular mineral and sugar up to 350 mOsm, pH 3.5-7.8, sweetener up to 7 wt %, alcohol up to 3 wt %, protein up to 30 wt %, fiber 20-37 gram per 2000 calories, at least 30% of calories are derived from complex carbohydrate, and up to 5% by volume gas, which will release a meaningful smell when being consumed. The solid phase includes at least 10% by weight plant mix, complex carbohydrate, protein, fat, and a combination thereof The beverage is natural and balanced referred to physiological body composition for normalizing body composition and fluid metabolism toward optimal body fitness with increased sensory experience and satiety.

L8 ANSWER 23 OF 28 USPATFULL  
AN 2000:174376 USPATFULL  
TI Nucleic acids encoding hedgehog proteins  
IN Ingham, Philip W., Summertown, United Kingdom  
McMahon, Andrew P., Lexington, MA, United States  
Tabin, Clifford J., Cambridge, MA, United States  
Bumcrot, David A., Belmont, MA, United States

Marti-Gorostiza, Elisa, Brookline, MA, United States  
 PA President & Fellows of Harvard College, Cambridge, MA, United States  
 (U.S. corporation)  
 Imperial Cancer Research Technology, Ltd., United Kingdom (non-U.S.  
 corporation)  
 PI US 6165747 20001226  
 AI US 1995-460900 19950605 (8)  
 RLI Continuation-in-part of Ser. No. US 1995-435093, filed on 4 May 1995  
 which is a continuation-in-part of Ser. No. US 1994-356060, filed on 14  
 Dec 1994, now patented, Pat. No. US 5844079 which is a  
 continuation-in-part of Ser. No. US 1993-176427, filed on 30 Dec 1993,  
 now patented, Pat. No. US 5789543  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Kaufman, Claire M.  
 LREP Foley, Hoag & Eliot, LLP, Vincent, Matthew P., Varma, Anita  
 CLMN Number of Claims: 50  
 ECL Exemplary Claim: 1  
 DRWN 17 Drawing Figure(s); 19 Drawing Page(s)  
 LN.CNT 9236  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention concerns the discovery that proteins encoded by a  
 family of vertebrate genes, termed here hedgehog-related genes, comprise  
 morphogenic signals produced by tissue patterning centers, and are  
 involved in the formation of ordered spatial arrangements of  
 differentiated tissues in vertebrates. The present invention makes  
 available compositions and methods that can be utilized, for example to  
 generate and/or maintain an array of different vertebrate tissue both in  
 vitro and in vivo.

L8 ANSWER 24 OF 28 USPATFULL  
 AN 1999:142106 USPATFULL  
 TI Human ubiquitin conjugating enzyme  
 IN Draetta, Giulio, Winchester, MA, United States  
 Rolfe, Mark, Newton Upper Falls, MA, United States  
 Eckstein, Jens W., Cambridge, MA, United States  
 PA Mitotix, Inc., Cambridge, MA, United States (U.S. corporation)  
 PI US 5981699 19991109  
 AI US 1994-247904 19940523 (8)  
 RLI Continuation-in-part of Ser. No. US 1994-176937, filed on 4 Jan 1994,  
 now abandoned  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Achutamurthy, Ponnathapura  
 LREP Vincent, Matthew P., Arnold, Beth E. Foley, Hoag & Eliot LLP  
 CLMN Number of Claims: 26  
 ECL Exemplary Claim: 1  
 DRWN 3 Drawing Figure(s); 36 Drawing Page(s)  
 LN.CNT 4469  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention concerns a novel human ubiquitin-conjugating  
 enzyme which is implicated in the ubiquitin-mediated inactivation of  
 cell-cycle regulatory proteins, particularly p53. The present invention  
 makes available diagnostic and therapeutic assays and reagents for  
 detecting and treating transformed cells, such as may be useful in the  
 detection of cancer. The present invention also provides reagents for  
 altering the normal regulation cell proliferation in untransformed  
 cells, such as by upregulating certain cell-cycle checkpoints, e.g. to  
 protect normal cells against DNA damaging reagents.

L8 ANSWER 25 OF 28 USPATFULL  
 AN 1999:67160 USPATFULL  
 TI Nucleic acids encoding tumor virus susceptibility genes  
 IN Brojatsch, Jurgen, Jamaica Pond, MA, United States  
 Naughton, John, Somerville, MA, United States

Young, John A. T., Auburndale, MA, United States  
PA President & Fellows of Harvard College, Cambridge, MA, United States  
(U.S. corporation)  
PI US 5912141 19990615  
AI US 1996-651579 19960522 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Feisee, Lila; Assistant Examiner: Kaufman, Claire M.  
LREP DeConti, Jr., Giulio A.Lahive & Cockfield, LLP  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 15  
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 3582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns the discovery of a new member of the TNF receptor superfamily, referred to herein as the candidate "tvb receptor". Experimental evidence suggests that the instant gene corresponds to the gene of the tvb.sup.s3 locus responsible for mediating certain viral infection. The tvb receptor plays a functional role as the receptor for certain of the avian leukosis/sarcoma viruses (ALSV) in avians, and a likely role as a receptor for tumor viruses in other animals, e.g., the feline leukemia virus and the like. Moreover, inspection of the tvb sequence, particularly in comparison with other TNF receptors, reveals the presence of a "death domain" in the cytoplasmic tail of the tvb receptor, suggesting a role for the tvb receptor in determining tissue fate and maintenance. For instance, the tvb genes and gene products may participate, under various circumstances, in the control of proliferation, differentiation and/or cell death.

L8 ANSWER 26 OF 28 USPATFULL

AN 1998:45084 USPATFULL

TI Ubiquitin conjugating enzymes

IN Draetta, Giulio, Winchester, MA, United States

Rolfe, Mark, Newton Upper Falls, MA, United States

Eckstein, Jens W., Cambridge, MA, United States

Cottarel, Guillaume, Chestnut Hill, MA, United States

PA Mitotix, Inc., Cambridge, MA, United States (U.S. corporation)

PI US 5744343 19980428

AI US 1994-305520 19940913 (8)

RLI Continuation-in-part of Ser. No. US 1994-247904, filed on 23 May 1994 which is a continuation-in-part of Ser. No. US 1994-176937, filed on 4 Jan 1994, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Hobbs, Lisa J.

LREP Vincent, Esq., Matthew P., Arnold, Esq., Beth E.Foley, Hoag & Eliot LLP

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 41 Drawing Figure(s); 41 Drawing Page(s)

LN.CNT 3350

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention concerns three ubiquitin-conjugating enzymes.

L8 ANSWER 27 OF 28 USPATFULL

AN 77:16848 USPATFULL

TI Method for preparation of low-phenylalanine plastein

IN Fujimaki, Masao, Tokyo, Japan

Arai, Soichi, Yokohama, Japan

Watanabe, Michiko, Matsudo, Japan

PA Fuji Oil Company, Ltd., Osaka, Japan (non-U.S. corporation)

PI US 4016147 19770405

AI US 1976-649794 19760116 (5)

PRAI JP 1975-7471 19750116

DT Utility



FS Granted  
EXNAM Primary Examiner: Shapiro, Lionel M.  
LREP Wenderoth, Lind & Ponack  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 520

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Method for the preparation of a low-**phenylalanine** plastein comprising hydrolyzing stepwise a certain albumin or globulin protein with an endopeptidase having an affinity for the aromatic acid components, and an exopeptidase, subjecting the hydrolyzate thus-**obtained** to gel-filtration to divide it into two fractions, one being constituted with **aromatic amino acids** and the other being constituted with oligopeptides almost free from the **aromatic amino acids**, and then subjecting the latter fraction to usual plastein synthesis. **Tyrosine** and/or tryptophan may be added to the substrate at the plastein synthesis in order to incorporate them into the plastein molecules. The resultant plasteins may be purified through ultra-filtration in order to remove the remaining free amino acids and low-molecular peptides.

L8 ANSWER 28 OF 28 WPIDS (C) 2002 THOMSON DERWENT

AN 1999-592846 [51] WPIDS

DNC C1999-173255

TI Production of **bioactive peptide** compositions, useful in animal feed to enhance growth of warm blooded animal.

DC B04 C03 D13 D16

IN RAA, J; RORSTAD, G

PA (BIOT-N) BIOTEC ASA; (RAAJ-I) RAA J; (RORS-I) RORSTAD G

CYC 29

PI EP 951837 A1 19991027 (199951)\* EN 9p

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

NO 9901736 A 19991018 (199953)

CA 2269396 A1 19991016 (200012) EN

JP 2000001499 A 20000107 (200012) 24p

US 2001036915 A1 20011101 (200168)

US 6376650 B1 20020423 (200232)

ADT EP 951837 A1 EP 1999-302837 19990413; NO 9901736 A NO 1999-1736 19990413;  
CA 2269396 A1 CA 1999-2269396 19990415; JP 2000001499 A JP 1999-107311  
19990414; US 2001036915 A1 Div ex US 1998-61575 19980416, US 2001-854968  
20010514; US 6376650 B1 US 1998-61575 19980416

PRAI US 1998-61575 19980416; US 2001-854968 20010514

AB EP 951837 A UPAB: 19991207

NOVELTY - The production of **bioactive peptide** (I) compositions is new, and comprises:

(a) treating a protein source with an acid;

(b) contacting the resulting acid treated protein source with **pepsin** enzyme derived from fish;

(c) removing lipids from the **pepsin** treated acidified protein source;

(d) removing solids from **pepsin** treated source; and

(e) recovering the resulting **bioactive peptide** compositions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) **bioactive peptide** product (Ia);

(2) production of growth enhancing peptides (II) characterized by comprising enzymatically hydrolyzing a protein source with **pepsin** enzyme source derived from fish at pH 2-6;

(3) **bioactive peptide** compositions comprising essentially of a mixture of peptides having an **aromatic amino acid** in the N-terminal position, produced by **enzymatic hydrolysis** of a protein source at pH 1-6 with

**pepsin** derived from fish as the **hydrolytic enzyme**;

(4) a process for enhancing the growth of a warm blooded animal and fish comprising feeding the animal with an amount of (II) sufficient to effect growth; and

(5) a feed composition for animals which will enhance growth comprising (II).

USE - The **bioactive peptide** products (Ia) and compositions (I) are useful for enhancing growth in warm blooded animals, especially for the production of feed to enhance animal growth (all claimed).

ADVANTAGE - The **bioactive peptide** product (Ia) and compositions (I) are used at low levels to enhance the growth of fish and provides an alternative to plasma products.  
Dwg.0/0

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Executing the logoff script...

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STN INTERNATIONAL LOGOFF AT 11:53:02 ON 23 JUN 2002